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Scimitar-horned Oryx – the End of the Line?

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The author is a biologist working in Chad with WWF support. He explains why he sees the new deep boreholes for watering cattle, installed on the edge of the Sahel by international aid, as the greatest single threat to the survival of arid-land wildlife, especially the scimitar-horned oryx.

The scimitar-horned oryx *Oryx dammah* is the one of Africa's most endangered antelopes. In spite of its former pan-sub-saharan range, its recent history has been one of decline and decimation.

The most striking feature of this large ungulate, weighing up to 220 kg, are its magnificent horns, which can grow to a length of 150 cm. Like the beisa and gemsbok it is a herding animal, living in groups of between 20 and 40, but at certain times of year, in areas of fresh pasture or surface water after rainfall, or during the wet season migrations, herds may number up to a thousand – in the past, considerably more.

Those days have gone, but it is easy to see how this oryx became such an abundant species, thanks to its feeding requirements, its ability to go for nine or ten months of the year without drinking, the lack of any natural predators, and the enormous habitat, the sub-desert and north sahelian steppes. Even as late as the 1920s and 30s this oryx was considered common over much of its range from the Atlantic to the Nile. Rock paintings in the Tassili n'Ajjer region of the Hoggar Massif, dating from c. 8500 BP*, depict men with bows and arrows hunting oryx, and it has always been a favourite animal for the hunt. But the real decline started with climatic changes that led to the drying out of the Sahara, from sahelo-sudan type savanna to the present desert. As the desert expanded to north and to south the oryx were pushed north and south, and desertification divided them into two isolated populations.

In all probability, the northern group were never as common or numerous as the southern, and were exterminated before 1900. The decline of the southern group can be chronicled fairly accurately, starting with the arrival of the French in West and West Central Africa in the latter part of the 19th

* Before the present.

century, and the subsequent installation of numerous military posts in the arid regions. Not only firearms but horses also increased, and much of the traditional hunting was done, as it is today, on horseback, with spears and lances. Fifty years ago the horse was a rarity amongst the nomadic herdsman; today even the smallest scale herdsman possesses at least one.

By the 1930s the decline was becoming obvious, even to the nomads; Brocklehurst² cites the increase in hunting and firearms and the presence of nomads as the principal causes. In the Second World War operations like General Leclerc's march from Chad to Tunisia with Free French forces must have created havoc among the fauna; armies like that need a lot of meat. After the war came an upsurge in the numbers of colonials, expatriates, military and administrators. Hunting for the pot, for sport or just for something to do was the order of the day, and the situation only worsened after independence, in the early sixties, with the increase in petro-chemical and mineralogical survey and exploitation.

The oryx have also suffered indirectly from the recent West African drought. Perfectly adapted as they are to drought, their reaction is mobility and migration. In years of low rainfall and sparse pasture, oryx migrate well south of the normal southern limits allowed them; this brings them into close contact with the nomads whose presence, even if they do not hunt them, frightens them from the better pastures. Their resistance falls, they become prone to worm infestations and disease, and, if chased, invariably fall to the lance or to heat exhaustion.

Another indirect threat is thoughtless development. In most sahelian states the main wealth is livestock, and the effect of the main aid programmes – UNDP, World Bank, USAID – is to convert nomads into sedentary herdsman around deep, permanent-supply boreholes; these seem to be the developers' answer to the problem of utilising the vast, waterless grasslands. But these grasslands have developed and evolved under complex climatic and biological conditions, and their stability and productivity will not stand the abuse of overgrazing and non-specific feeding. Since many of the northern steppe plants are annuals that produce masses of resistant seeds, one or two years' drought does little damage. Rainfall in the sahelo-saharan regions is variable and unpredictable, and when there is no rain there is no pasture; during the driest period of the recent drought, cattle were dying in their thousands, not of thirst but of hunger. More and more of the oryx's traditional pastures are coming under the hoof of the cow. Each year boreholes are dug further north. And each year the oryx gets rarer and rarer.

This is not an argument for ending cattle development in favour of oryx and other arid-land species, but for awareness and understanding of the habitat's capacity and capability. Cattle and oryx are not necessarily mutually exclusive, and efforts could be made to take into account the needs of the wildlife. Wildlife is a potentially valuable economic resource, and the only long-term hope for the oryx and similar species is to put them on to an economic footing. Oryx are large, fast growing, efficient protein producers and range managers, able, unlike cattle, to exist on waterless range, and oryx-ranching under semi-domesticated conditions is entirely feasible. Meat and hide production would benefit the local inhabitants and also provide one of the best arguments for oryx conservation; tourism and hunting are others. Even today, the oryx population could support rational, carefully controlled trophy hunting, with

the money ploughed back into poaching control and reserve management.

There are very few game reserves or national parks in the desert and sahelo-saharan zone, despite the urgent need, the vast spaces, and the low population densities. The outstanding one is the Ouadi Rimé-Ouadi Achim Faunal Reserve, covering some 77,950 sq km, which protects scimitar-horned oryx, addax, three gazelles – dama, dorcas and red-fronted – cheetah and ostrich.^{3,1} Others are desperately needed in the Wadi Howar region of the Sudan and in the Termit-Ténéré-Tiguidit regions of Niger. Reserves for these arid-land species need to be large, allowing for the animals' normal seasonal movements plus a safety margin for abnormal years. They are costly to patrol and equip, and developing countries need outside help.

But money and equipment are not enough. Lobbying of the developing organisations to ensure ecologically sound policies is vital. Otherwise much sahelo-saharan development is likely to be self-destructive, irreparably damaging or debilitating the habitat. It is not over-dramatising the situation to say, that unless new measures are taken and old ones, such as the rigorous control of poaching, stepped up, the scimitar-horned oryx will be extinct in the wild, even inside the reserves that exist, before the end of the century.

Bibliography

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2. BROCKLEHURST, H.C. (1931) Game animals of the Sudan, their habits and distribution. Gurney and Jackson, London.
3. NEWBY, J.E. (1974) The ecological resources of the Ouadi Rimé-Ouadi Achim Faunal Reserve. FAO, Rome.
4. World Wildlife Fund (WWF) (1977) Report Project 1219. World Wildlife Year-book, 1975–76: 92–101.

Bowheads and Eskimo Culture

Supporters of the 'right' of Alaskan Inuit (Eskimos) to kill the bowhead whale—including the US Government—cite the animal, which now numbers 1500 at most, as central to the native culture. *Massachusetts Audubon Newsletter* points out that 'as things now stand, the Eskimos have lost from their culture the hand-thrown harpoon . . . replaced by a bomb harpoon fired from a shoulder gun . . . the skin boat in which they once cooperatively pursued the whale . . . replaced by the modern outboard-powered boat . . . the dog teams that once carried the hunters to lookout posts, the dogs having been replaced by snowmobiles . . . the old-time village get-together during which the whale was hauled up on the ice for stripping'. Early this century an average of 10 bowheads were taken by Eskimos each year; in the early 1970s the figure was 29, and in 1976 48 were killed and 77 wounded. See *'Disastrous Whaling Decision'*, p. 203.

Swamp Deer in Kanha

Claude Martin's paper on the Status and Ecology of Barasingha in Kanha National Park, in the Bombay Natural History Society *Journal* 74, 1, April 1977, based on his four-year survey of the sole surviving population of *Cervus duvauceli branderi*, shows how improved management of their environment has resulted in greater breeding success and a population increase. The removal of villages from the park—which was achieved by creating better conditions outside so that the villagers were willing to leave—was an important factor, as was also the increase in chital (spotted deer) which provided an alternative prey for the tigers. Numbers increased from about 70 in 1969 to over 140 in 1973. The 1977 figure was 284; 1978 is expected to be well over 300.